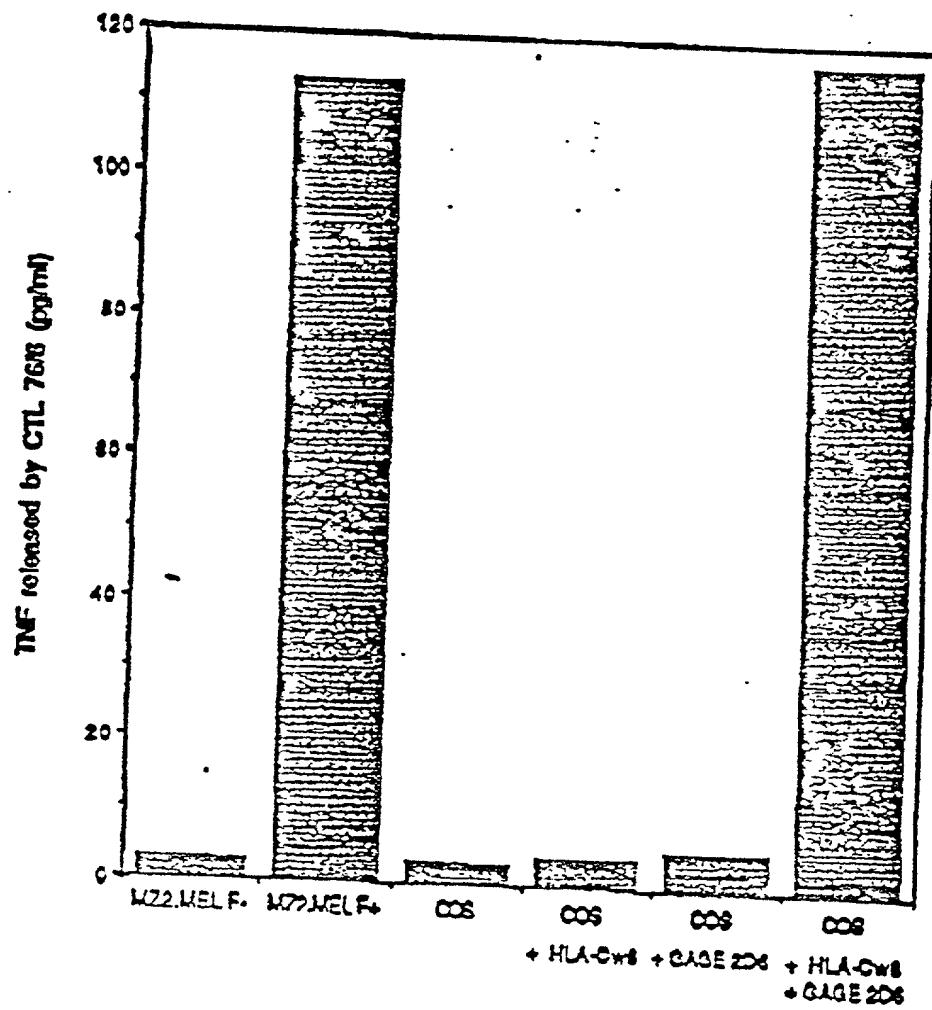


Figure 1



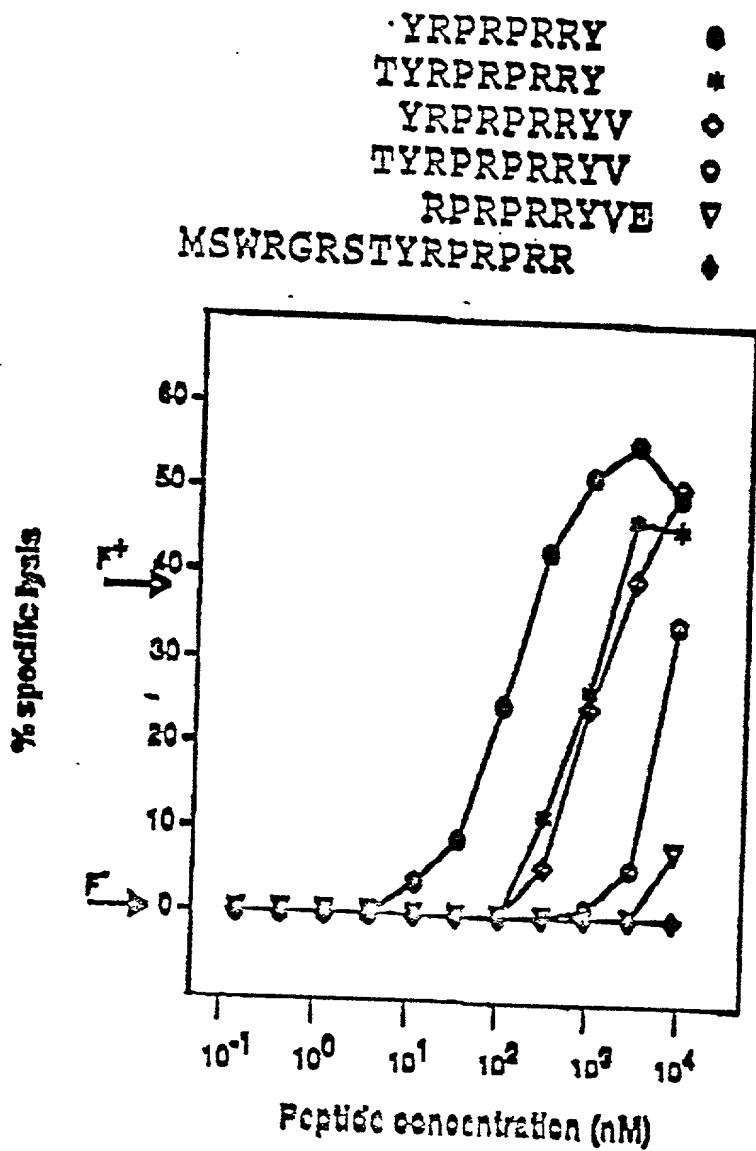


Figure 3

VDE 44

CAGE-1	TCTGTCGTTAAGAATGCGTTGGCAGGAAATA	TGCAACG---TATCCGCGCTAGACCCAGTGGC	TATGTAACGCGCTAATGCGATTCGGCGCT
CAGE-2	TGTGTCGTTAAGAATGCGTTGGCAGGAAATA	TGCAACG---TATCCGCGCTAGACCCAGTGGC	TATGTAACGCGCTAATGCGATTCGGCGCT
CAGE-3	TTCGACAGCGGCGGAGGAAATA	TGCAACGATTATTGCGCTAGACCCAGTGGC	TATGTAACGCGCTAATGCGATTCGGCGCT
CAGE-4	TCTGTCGTTAAGAATGCGTTGGCAGGAAATA	TGCAACGATTATTGCGCTAGACCCAGTGGC	TATGTAACGCGCTAATGCGATTCGGCGCT
CAGE-5	TGTGTCGTTAAGAATGCGTTGGCAGGAAATA	TGCAACGATTATTGCGCTAGACCCAGTGGC	TATGTAACGCGCTAATGCGATTCGGCGCT
CAGE-6	TGTGTCGTTAAGAATGCGTTGGCAGGAAATA	TGCAACGATTATTGCGCTAGACCCAGTGGC	TATGTAACGCGCTCTAATGCGATTCGGCGCT

YDE 43

GAGE-1	ATCCGGCCCGAGCAGCTTCAGTCATGAGCTG	GAACCAACACACCTGAAACGAAACCA	CCAACTCTAACGGTCAAGGATCTCTCCAGCTGCT
GAGE-2	ATGGGGGGCGAGCAGCTTCAGTCATGAGCTG	GAACCAACACACCTGAAACGAAACCA	CCAACTCTAACGGTCAAGGATCTCTCCAGCTGCT
GAGE-3	ATGGGGGGCGAGCAGCTTCAGTCATGAGCTG	GAACCAACACACCTGAAACGAAACCA	CCAACTCTAACGGTCAAGGATCTCTCCAGCTGCT
GAGE-4	ATGGGGGGCGAGCAGCTTCAGTCATGAGCTG	GAACCAACACACCTGAAACGAAACCA	CCAACTCTAACGGTCAAGGATCTCTCCAGCTGCT
GAGE-5	ATGGGGGGCGAGCAGCTTCAGTCATGAGCTG	GAACCAACACACCTGAAACGAAACCA	CCAACTCTAACGGTCAAGGATCTCTCCAGCTGCT
GAGE-6	ATGGGGGGCGAGCAGCTTCAGTCATGAGCTG	GAACCAACACACCTGAAACGAAACCA	CCAACTCTAACGGTCAAGGATCTCTCCAGCTGCT

GAGE-1	CGGGAGGGAGACGGATGAGGAGCCATCTGCA	GGTCAGGGCGGAGGCTGAGCT	TAGC	CAGGAAACGGGTACCCACAGACTCCGTGT
GAGE-3	CGGGAGGGAGACGGATGAGGAGCCATCTGCA	GGTCAGGGCGGAGGCTGAGCT	TAGC	CAGGAAACGGGTACCCACAGACTCCGTGT
GAGE-3	CGGGAGGGAGACGGATGAGGAGCCATCTGCA	GGTCAGGGCGGAGGCTGAGCT	TAGC	CAGGAAACGGGTACCCACAGACTCCGTGT
GAGE-4	CGGGAGGGAGACGGATGAGGAGCCATCTGCA	GGTCAGGGCGGAGGCTGAGCT	TAGC	CAGGAAACGGGTACCCACAGACTCCGTGT
GAGE-5	CGGGAGGGAGACGGATGAGGAGCCATCTGCA	GGTCAGGGCGGAGGCTGAGCT	TAGC	CAGGAAACGGGTACCCACAGACTCCGTGT
GAGE-6	CGGGAGGGAGACGGATGAGGAGCCATCTGCA	GGTCAGGGCGGAGGCTGAGCT	TAGC	CAGGAAACGGGTACCCACAGACTCCGTGT

VDE 24

GAGE-1	GAATGTGAGAGATGGTCTCTGATGGGAGGGAG	ATGGGACCCCCCAATTCCAGAGGGGGTCAA
GAGE-2	GAATGTGAGAGATGGTCTCTGATGGGAGGGAG	ATGGGACCCCCCAATTCCAGAGGGGGTCAA
GAGE-3	GAATGTGAGAGATGGTCTCTGATGGGAGGGAG	ATGGGACCCCCCAATTCCAGAGGGGGTCAA
GAGE-4	GAATGTGAGAGATGGTCTCTGATGGGAGGGAG	ATGGGACCCCCCAATTCCAGAGGGGGTCAA
GAGE-5	GAATGTGAGAGATGGTCTCTGATGGGAGGGAG	ATGGGACCCCCCAATTCCAGAGGGGGTCAA
GAGE-6	GAATGTGAGAGATGGTCTCTGATGGGAGGGAG	ATGGGACCCCCCAATTCCAGAGGGGGTCAA

GAGE-1	GTGGCCGAGCTGGATTCTCTGGCTTTA ATGAACTTGGCTTAAATCTTTCCCA CGGAAACCTGCTGACTGAAATATCTAA
GAGE-2	.....
GAGE-3	.....
GAGE-4	.....
GAGE-5	.....
GAGE-6	.....

GAGE-1	GGCGAGAGACCGTTAGTTCATCTG	GGCGAGAGACCGTTAGTTCATCTG	GGCGAGAGACCGTTAGTTCATCTG	GGCGAGAGACCGTTAGTTCATCTG
GAGE-2	.....	.....	.....	.....
GAGE-3	.....	.....	.....	.....
GAGE-4	.....	.....	.....	.....
GAGE-5	.....	.....	.....	.....
GAGE-6	.....	.....	.....	.....

GAGE-1	CCTATGTTGAAATTTCATTTTCCTTACACCTTCTCCAAA
GAGE-2	CCTATGTTGAAATTTCATTTTCCTTACACCTTCTCCAAA
GAGE-3	CCTATGTTGAAATTTCATTTTCCTTACACCTTCTCCAAA
GAGE-4	CCTATGTTGAAATTTCATTTTCCTTACACCTTCTCCAAA
GAGE-5	CCTATGTTGAAATTTCATTTTCCTTACACCTTCTCCAAA
GAGE-6	CCTATGTTGAAATTTCATTTTCCTTACACCTTCTCCAAA

Figure 4

antigenic
peptide

GAGE-1	HS-HRGSTVPRPRRYVPPPEI	GPKRPEQFSEDEVPATPEEGIPATO	RQDPAAQEGEDEGASAGQGPKPEA	7
GAGE-2	HS-HRGSTVPRPRRYVPPPEI	GPKRPEQFSEDEVPATPEEGIPATO	RQDPAAQEGEDZGASAGQGPKPEA	7
GAGE-3	HS-HRGSTVPRPRRYVPPPEI	GPKRPEQFSEDEVPATPEEGIPATO	RQDPAAQEGEDEGASAGQGPKPEA	7
GAGE-4	HS-HRGSTVPRPRRYVPPPEI	GPKRPEQFSEDEVPATPEEGIPATO	RQDPAAQEGEDZGASAGQGPKPEA	7
GAGE-5	HS-HRGSTVPRPRRYVPPPEI	GPKRPEOYSDEVPATPEEGIPATO	RQDPAAQEGEDEGASAGQGPKPEA	7
GAGE-6	HS-HRGSTVPRPRRYVPPPEI	GPKRPEOYSDEVPATPEEGIPATO	RQDPAAQEGEDEGASAGQGPKPEA	7

GAGE-1	DSQEQQHPQTGCECEDGPDQEOP	PKPEEVKTPPEEIKRSHTVAGTGILW	LLXRNCPPLKLSPKRP	13
GAGE-2	DSQEQQHPQTGCECEDGPDQEOP	PKPEEVKTPPEEIKQSQC	-----	11
GAGE-3	DSQEQQHPQTGCECEDGPDQEOP	PKPEEVKTPPEEIKQSQC	-----	11
GAGE-4	DSQEQQHPQTGCECEDGPDQEOP	PKPEEVKTPPEEIKQSQC	-----	11
GAGE-5	DSQEQQHPQTGCECEDGPDQEOP	PKPEEVKTPPEEIKQSQC	-----	11
GAGE-6	DSQEQQHPQTGCECEDGPDQEOP	PKPEEVKTPPEEIKQSQC	-----	11

FIGURE 5

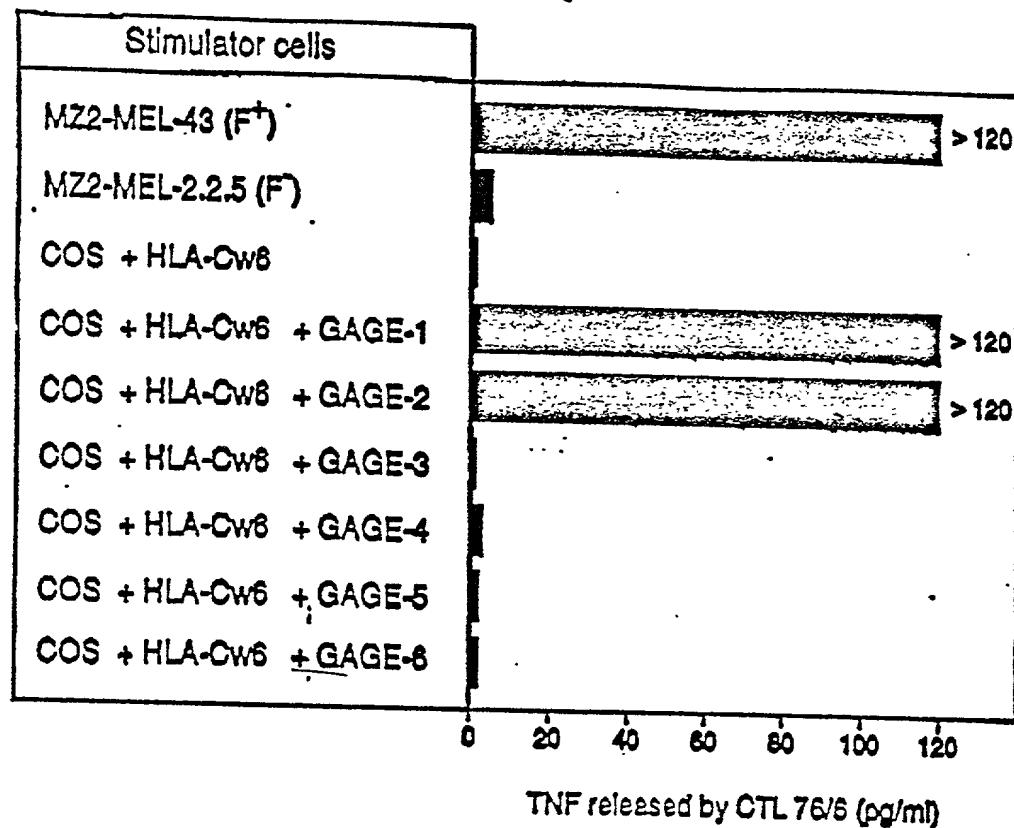


FIGURE 6

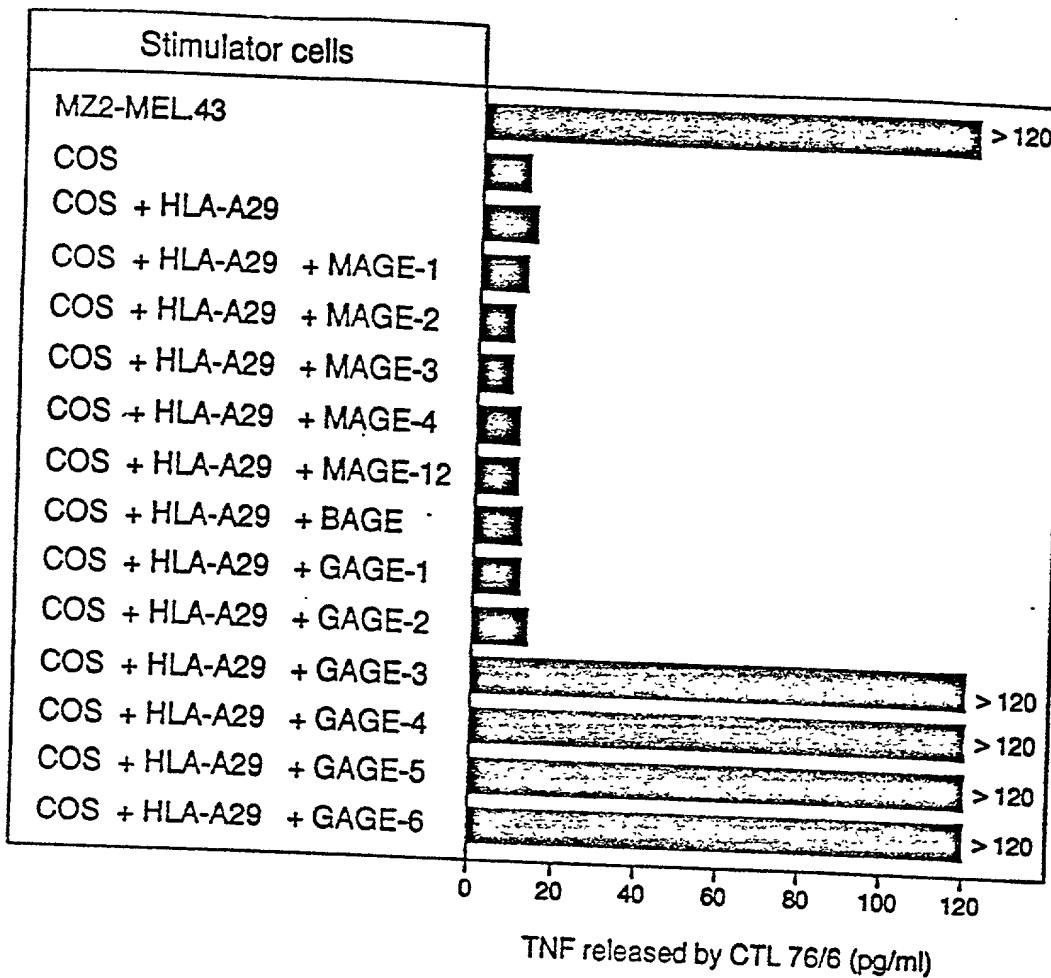


Figure 7. Stimulation of MZ2-CTL 22/23 by COS-7 cells transiently transfected with an HLA-A29 cDNA and MAGE, BAGE or GAGE cDNA. The CTL was added after 24 hours and the production of TNF was estimated 24 hours later. MZ2-MEL.43 was used as a positive control stimulator cell.

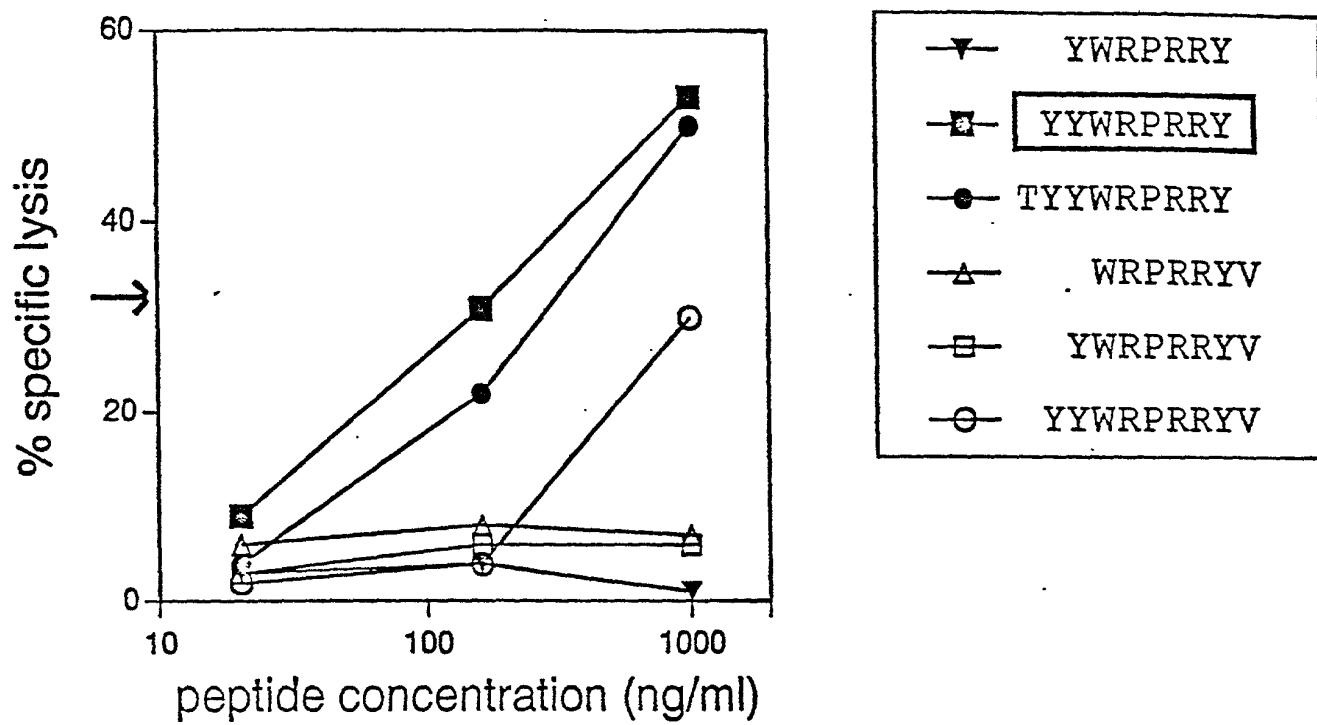


Figure 6. Lysis by MZ2-CTL 22/23 of lymphoblastoid cell line LB17-EBV incubated with GAGE-encoded peptide YYWPRPRRY. Thousand 51Cr-labelled LB17-EBV target cells were incubated in 96 well microplates in the presence of various concentrations of peptide for 15 minutes at 37°C. An equal volume containing 6000 CTL was then added. Chromium release was measured after 4 hours at 37°C. We have indicated the final concentration of peptides during the incubation of the target cells with the CTL. The arrow indicates the percentage of lysis of MZ2-MEL.43 cells.